burrow always running in the same general direction, of which the others seemed to be branches. They advanced at the rate of 3 cm. to 4 cm. a day. All efforts to find the parasite were in vain. Sections made of these burrows showed that they were situated within the epidermis, and in places some of the cells looked as if they had undergone disintegration and digestion. In the corium beneath there was a considerable infiltrate of lymphoid cells, among which, and in the cells included in the burrow, were a number of eosinophiles. The authors suppose that the parasite gained access to the skin through the poultice of snails applied to the furuncle by the patient.

Paget's Disease.—Fabry and Trautmann (*Archiv für Dermatologie und Syphilis,* Band lxix., Heft 1 and 2) report the results of their study of a new case of this disease. They found nothing especially new as to the histology of the disease, but in the epithelium about the margin of the diseased area, in sections made from various portions of the eroded surface and the axillary gland of the affected side, they found, by staining with alum hæmatoxylin, peculiar round corpuscles with darkly stained margins and clear centres, which they regarded as yeast bodies. In sections these bodies formed coarsely granular masses contained in cavities in the cutis. Pure cultures were obtained within twenty-four hours. The authors conclude that Paget's disease is an affection *sui generis,* belonging neither to eczema nor carcinoma, which, owing to its very chronic course and situation in the epidermis, offers specially favorable conditions for the development of carcinoma. Should the presence of the yeast fungus be confirmed by subsequent investigations, the question would arise whether this malady should not be looked upon as a blastomycosis.

Tuberculosis of the Skin.—Klingmüller (*Archiv für Dermatologie und Syphilis,* Band lxix., Heft 1 and 2) reports some of the results of his study, clinical and experimental, of a number of tuberculous affections of the skin. In 18 cases of lichen scrofulosorum 3 followed injections of tuberculin; these 3 cases presented no appreciable clinical differences from the other cases. In not a single one of the whole series of cases was it possible to demonstrate the presence of the tubercle bacillus, although more than 700 preparations were examined. The form which followed tuberculin infections was observed only in those who already showed evidences of tuberculosis or scrofula, although many such injections were made in other patients for the purpose of learning whether, beside some dermatosis, tuberculosis or scrofula existed.

As eczema scrofulosorum, the author reports the case of a young woman, who, besides lupus vulgaris of the forearm and a lichen scrofulosorum, had a brownish-red, scaly patch upon the calf, which was not well-defined, but gradually faded away into the surrounding parts. Examination of an excised portion of the patch showed a slight perivascular infiltration about the horizontal and ascending branches of the papillary vessels and a tubercle-like focus with giant and epithelioid cells in the fat tissue. No tubercle bacilli were demonstrable. The author thinks it possible that this patch may have been a beginning erythema induratum.

A case of lupus vulgaris occurring at the site of a tuberculin injection also was observed in a woman who had suffered from lupus of the upper lip and the nose. The histological changes present in this lesion were like those seen in ordinary lupus tissue.

As to the etiology of lichen scrofulosorum, Klingmüller believes it is an affection which occurs only in tuberculous subjects, not as the direct effect of the tubercle bacillus, but through toxic materials produced by this organism. Lupus vulgaris is caused by virulent tubercle bacilli capable of multiplication. As the skin and subcutaneous tissue do not offer favorable conditions for their multiplication, they are found in small numbers. The author thinks the case of inoculation lupus reported makes the supposition probable that the extensive tissue changes in lupus arise from the action of toxic matter coming from the bacilli, which may be either an excretion product of the living organism or an extract of dead bacilli.

PATHOLOGY AND BACTERIOLOGY.

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The Elastic Tissue of the Ventricles of the Heart.—POSCHARISKY (*Ziegler's Beiträge*, 1904, Band xxxv. p. 510) studied the elastic tissue of the ventricles in a number of animals and in fifty individuals dead of various diseases. Of these fifty hearts only one was normal. Sections through the ventricle of this normal heart showed that the adventitia about the large bloodvessels was richly provided with elastic fibres, which ran from this zone along the coarser bundles of connective tissue that pierce the ventricular wall as well as into the heart's flesh, where they surrounded the muscle cells in the form of loops. From the epicardium as well as from the endocardium elastic fibres spread along the vessels into the myocardium. In 70 per cent. of the hearts from persons over forty years of age an increase could be made out in the intermuscular elastic fibres. In persons under this age it was rare to find such an increase. The striking hyperplasia of the elastic tissue seen in chronic myocardial affections appeared either in the adventitia of the vessels or in the outer layer of the endocardium, but the intermuscular fibrils played no part in the process.

Improved Technique of Agglutination Test in Typhoid Fever; the Use of Formalized Cultures.—It has been shown by Pröscher that a twenty-four-hour bouillon culture of bacillus typhosus which has been killed with formalin gives the same specific agglutinating reaction as the living culture when mixed with blood or blood serum from a typhoid-fever patient.